

## ABSTRACT

A method and apparatus for manufacturing patterns on a reticle blank  
5 comprising a substrate made from material transparent to UV irradiation and  
having a first surface and a second opposite surface, the first surface coated  
with a chrome layer. The method comprises providing ultra-short pulsed laser  
beams, focusing means, relative displacement facilitator for facilitating relative  
displacement of the reticle blank relative to said at least one of a plurality of  
10 target locations, and a controller for controlling the synchronization and  
operation of the laser beam source, the focusing means and the relative  
displacement facilitator. Ultra-short pulsed laser beam is irradiated in a  
predetermined pattern directed at the second surface and passing through the  
substrate, focused on the chrome layer or on its proximity.